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APPLICATION NO. FILING DATE FIRST NAMED INVENTOR ATTORNEY DOCKET NO. CONFIRMATION NO. 10/081,268 02/22/2002 Michael B. Northcott 10018686-1 9852 **EXAMINER** 7590 08/11/2006 HEWLETT-PACKARD COMPANY DESHPANDE, KALYAN K Intellectual Property Administration ART UNIT PAPER NUMBER P.O. Box 272400 Fort Collins, CO 80527-2400 3623

DATE MAILED: 08/11/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

		Application No.	Applicant(s)
Office Action Summary		10/081,268	NORTHCOTT ET AL.
		Examiner	Art Unit
		Kalyan K. Deshpande	3623
The MAILING DATE of this communication appears on the cover sheet with the correspondence address			
Period for Reply			
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).			
Status			
1)⊠	Responsive to communication(s) filed on 26 M	<u>ay 2006</u> .	
2a)⊠	This action is <b>FINAL</b> . 2b) ☐ This	action is non-final.	
3) 🗌	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is		
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.			
Disposition of Claims			
4)⊠ Claim(s) <u>1-8,10-19 and 21-23</u> is/are pending in the application.			
· ·	4a) Of the above claim(s) is/are withdrawn from consideration.		
5) Claim(s) is/are allowed.			
6)⊠	S)⊠ Claim(s) <u>1-8,10-19 and 21-23</u> is/are rejected.		
7)	7) Claim(s) is/are objected to.		
8) Claim(s) are subject to restriction and/or election requirement.			
Application Papers			
9) The specification is objected to by the Examiner.			
10)⊠ The drawing(s) filed on <u>22 February 2002</u> is/are: a)⊠ accepted or b)□ objected to by the Examiner.			
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).			
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).			
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.			
Priority under 35 U.S.C. § 119			
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).			
a) ☐ All b) ☐ Some * c) ☐ None of:			
1. Certified copies of the priority documents have been received.			
2. Certified copies of the priority documents have been received in Application No			
3. Copies of the certified copies of the priority documents have been received in this National Stage			
application from the International Bureau (PCT Rule 17.2(a)).			
* See the attached detailed Office action for a list of the certified copies not received.			
Attachment(s)			
	e of References Cited (PTO-892)	4) Interview Summary	
	e of Draftsperson's Patent Drawing Review (PTO-948) mation Disclosure Statement(s) (PTO-1449 or PTO/SB/08)	Paper No(s)/Mail Da 5) Notice of Informal P	ate atent Application (PTO-152)
Paper No(s)/Mail Date <u>2/22/2002</u> . 6) Other:			

#### **DETAILED ACTION**

#### Introduction

1. The following is a final office action in response to the communications received on May 26, 2006. Claims 1-8, 10-19, and 21-23 are now pending in this application.

# Response to Amendments

2. Applicants' amendments to claims 1-8 and 10-19 are acknowledged. Applicants' cancellation of claims 9 and 20 is acknowledged. Applicants' submission of new claims 21-23 is acknowledged. Examiner asserts new 35 U.S.C. 112 (1<sup>st</sup> paragraph) and 35 U.S.C. 101 rejections based on the claims as amended. Examiner further asserts new 35 U.S.C. 102(b) and 35 U.S.C 103 rejections as necessary due to the amendment of the claims. Examiner withdraws the 35 U.S.C. 112 (2<sup>nd</sup> paragraph) rejections.

## Response to Arguments

3. Applicants' arguments filed on May 19, 2006 have been fully considered but are not found persuasive or are moot in view of the new ground(s) of rejection. Applicants argue i) Examiner misapplied the concrete results standard to claim 1 and ii) Ulwick teachings fail to render the invention as amended obvious.

In response to Applicants' argument Examiner misapplied the 35 U.S.C. 101 concrete results standard to claim 1, Examiner respectfully disagrees. Specifically, Applicants' argue i) Examiner applied a standard that would "render ineligible for patenting the subject matter of all claims for processes in which some or all of the steps can be carried out in or with the aid of the human mind" and ii) Examiner misinterpreted

the Interim Guidelines in that Examiner required the result of the invention to be substantially the same when performed by different persons.

In response to Applicants' first argument, Examiner respectfully disagree. The applicable standard for the concreteness test is that "in order for results to be concrete, the results must be substantially repeatable or the process must be substantially produce the same results again". A method that requires some or all of the steps to be carried out in the human mind may pass the concreteness test so long as the results of such a method are substantially repeatable. In order for a method requiring mental steps to be substantially repeatable, the disclosure must provide an objective standard that enables those of ordinary skill in the art to perform the method and achieve substantially the same results. An invention that fails to disclose an objective standard for each step of a method to be performed will not produce substantially the same results when repeated. This standard, as applied to amended claim 1 is further discussed below.

In response to Applicants' second argument, Examiner has not interpreted the Interim Guidelines to require the claimed method to be substantially the same when performed by different persons. As is discussed above, in order for a method requiring mental steps to be substantially repeatable, the disclosure must provide an objective standard that enables those of ordinary skill in the art to perform the method and achieve substantially the same results. Examiner intended to express that the method must produce substantially repeatable results whenever performed, whether the performance is repeated by the same user or different users.

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Applicants' arguments regarding Ulwick's teachings fail to render the present invention as amended obvious have been considered but are moot in view of the new ground(s) of rejection as necessitated by amendment.

#### Information Disclosure Statement

4. The examiner has reviewed the patents and articles supplied in the Information Disclosure Statements (IDS) provided on February 22, 2002.

## Claim Rejections - 35 USC § 112

- 5. The following is a quotation of the first paragraph of 35 U.S.C. 112:
  - The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.
- 6. Claims 1-8, 10-19, and 21-23 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Claim 1 recites the limitations, "determining a target customer need state" and "ranking the tasks of the process map". These limitations are representative of steps that may be performed without being repeatable or predictable based on the amount of direction provided by the disclosure, thus raising the issue of abstract ideas that require undue experimentation for the invention to be performed. See MPEP § 2164.01(a). The Specification defines the scope of the limitation "determining a target customer need state" to require users to make "creative and intuitive leaps" to determine a

customer need state (see Specification page 24). These creative and intuitive leaps do not provide an objective standard that would allow one of ordinary skill in the art to achieve substantially repeatable results. The Specification defines "ranking the tasks of the process map" to rank tasks based on "estimated costs and outcome rates" (see Specification page 24). The Specification fails to provide an objective standard for assigning values to the parameters used to rank the tasks outside of merely "estimating" these values, thereby failing to provide one of ordinary skill in the art with the necessary steps to these parameters appropriate values. Since the scope of the claims, as determined by the Specification, do not have a clear objective standard to be applied to produce repeatable and predictable results nor are the results in a real-world form, one skilled in the art would have to conduct undue experimentation in order to perform the invention. Therefore, claim 1 is considered as failing to comply with the enablement requirement.

Claims 2-8, 10-19, and 21-23 repeat the limitations of claim 1; therefore these claims are rejected as well.

## Claim Rejections - 35 USC § 101

7. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

8. Claims 1-8, 10-19, and 21-23 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The claimed invention is

required to produce a useful, concrete, and tangible real-world result. An invention that fails to produce a tangible result is one that involves no more than the manipulation of an abstract idea. See *State Street Bank & Trust Co. v. Signature Financial Group Inc.*, 149 F. 3d 1368, 47 USPQ2d 1596 (Fed. Cir. 1998). In order to be concrete the result must be substantially repeatable or the process must substantially produce the same result again.

Claim 1 fails to produce a concrete result. Claim 1 recites the steps of "determining a target customer need state" and "ranking the tasks of the process map", which are mere abstract ideas that does not produce concrete results. A concrete result cannot be achieved unless the recited steps are repeatable and predictable. The results of these steps will not produce concrete real-world results since there is no evidence that these steps, when repeated, will produce substantially the same result. The Specification defines the scope of the limitation "determining a target customer need state" to require users to make "creative and intuitive leaps" to determine a customer need state (see Specification page 24). The use of creative and intuitive leaps do not provide an objective standard that would allow one of ordinary skill in the art to achieve substantially repeatable results. The Specification defines "ranking the tasks of the process map" to rank tasks based on "estimated costs and outcome rates" (see Specification page 24). The Specification fails to provide an objective standard for assigning values to the parameters used to rank the tasks outside of merely "estimating" these values, thereby failing to provide one of ordinary skill in the art with the necessary steps to these parameters appropriate values. Thus, the steps of "determining a target

customer need state" and "ranking the tasks of the process map" have not been defined to include a clear objective standard that will be repeatable and produce predictable results. Because the results produced by this step are not concrete, claim 1 is considered to be directed toward non-statutory subject matter.

Claims 2-8, 10-19, and 21-23 repeat the limitations of claim 1 without re-directing these limitations to statutory subject matter; therefore these claims are rejected as well.

## Claim Rejections - 35 USC § 102

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 10. Claims 1-6, 8-9, 12-15, and 17-22 are rejected under 35 U.S.C. 102(b) as being anticipated by Barkley et al. (Barkley, Bruce T.; Saylor, James H.; <u>Customer-Driven</u>

  <u>Project Management</u>, McGraw-Hill Inc., 1994).

As per claim 1, Barkley et al. teach:

A method of identifying potential business opportunities, comprising:

Determining a target customer need state from marketplace data associating potential target customer need states with respective parameters values (see pp. 110 and 116; where a list of all of the customer needs is compiled. Customer needs are compiled using data collected through surveys, interviews, current data, focus groups, brainstorming, and other sources. These data sources are the same as

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marketplace data. Customer needs are associated with values for several parameters, such as cost, resources, importance, time, effect, risk, and integration.);

Identifying a process representing a current marketplace response that addresses the determined target customer need state (see p. 111; where critical processes representing the customer need state are identified.);

Generating a process map comprising a network of tasks involved in the identified process (see pp. 256-258; where a process diagram shows a list of subprocesses associated with a process. A process diagram is the same as a process map. Subprocesses are tasks that comprise a process.);

Ranking the tasks of the process map (see p. 111; where processes are ranked based on which processes are critical. Assigning a level of critical to processes is the same as ranking the processes in terms of need.);

Selecting a highest ranked one of the tasks of the process map as a potential point of intervention in the identified process (see pp. 115-118; where the team focuses on a narrowly defined point in the process. This intervention point is selected based on actions that are directly associated with critical factors in the process. As discussed above, the critical processes are the same as highly ranked processes. This point is analyzed and a determination is made on whether an improvement can be made at this point in the process.); and

Producing a list of one or more customer needs associated with the selected task (see p. 118; where a detailed process diagram for customer needs is created.).

As per claim 2, Barkley et al. teach:

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The method of claim 1, wherein the determining comprises scanning the marketplace data to identify the target customer need state without foreknowledge of any of the potential target customer need states (see pp. 110 and 116; where a list of all of the customer needs is compiled. Customer needs are compiled using data collected through surveys, interviews, current data, focus groups, brainstorming, and other sources. These data sources are the same as marketplace data. Customer needs are associated with values for several parameters, such as cost, resources, importance, time, effect, risk, and integration. Customer needs are not known prior until an analysis of the marketplace data is performed.).

As per claim 3, Barkley et al. teach:

The method of claim 1, wherein the determining comprises scanning marketplace data in accordance with a preselected one of the potential target customer need states to identify the target customer need state (see p. 116; where the team decides the selection criteria in order target specific customer needs.).

As per claim 4, Barkley et al. teach:

The method of claim 1, wherein the determining comprises selecting as the target customer need state one of the potential target customer need states in the marketplace data that is associated with a highest total cost value (see p. 116; where one of the determining factors is cost.).

As per claim 5, Barkley et al. teach:

The method of claim 1, wherein the determining comprises selecting from the marketplace data a subset of the potential target customer need states and

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associating with each of the selected potential target customer need states a set of one or more tasks (see pp. 256-258; where a process diagram shows a list of subprocesses associated with a process. A process diagram is the same as a process map. Subprocesses are tasks that comprise a process.).

As per claim 6, Barkley et al. teach:

The method of claim 5, further comprising associating respective values to the tasks associated with each of the selected potential target customer need states (see pp. 256-258; where objectives, requirements, and target values are associated with tasks and processes.).

As per claim 8, Barkley et al. teach:

The method of claim 7, further comprising ranking the selected potential target customer need states in accordance with the values assigned to the associated tasks (see pp. 111 and 256-258; where values are associated with processes that define a customer need. The processes are ranked in terms of which processes are critical.).

As per claim 12, Barkley et al. teach:

The method of claim 1, wherein the producing comprises mapping the selected task into a network of one or more sub-tasks (see pp. 256-258; where a process diagram shows a list of subprocesses associated with a process. A process diagram is the same as a process map. Subprocesses are tasks that comprise a process.).

As per claim 13, Barkley et al. teach:

The method of claim 1, further comprising listing one or more projected customer problems associated with the selected task (see p. 118; where a detailed process diagram for customer needs is created.).

As per claim 14, Barkley et al. teach:

The method of claim 13, the producing comprises identifying one or more projected customer needs based at least in part upon the listed customer problems (see p. 118; where a detailed process diagram for customer needs is created.).

As per claim 15, Barkley et al. teach:

The method of claim 1, wherein the producing comprises identifying aspects of the selected task that enable at least one of a reduction of a cost of the identified process and an improvement in an outcome of the identified process (see p. 116; where processes and tasks are identified as improving opportunities. Cost factors, such as reducing costs, are incorporated in determining whether the task improves an opportunity.).

As per claim 17, Barkley et al. teach:

The method of claim 1, wherein the ranking comprises assigning values to the tasks in accordance with their potential impact on at least one reducing a cost of the identified process and improving an outcome of the identified process (see pp. 111, 116, and 256-258; where values are associated with processes that define a customer need. The processes are ranked in terms of which processes are critical. The processes are analyzed in terms of improvements.).

As per claim 18, Barkley et al. teach:

The method of claim 1, further comprising correlating one or more of the customer needs in the produced list with one or more core competencies and resources (see pp. 109-111; where the customer needs are correlated with the capabilities and availability of resources. Capabilities are the same as the core competencies.).

As per claim 19, Barkley et al. teach:

The method of claim 18, further comprising selecting for further investigation one or more customer needs in the produced list having highest correlations with the one or more core competencies and resources (see pp. 117-120; where selected opportunities are further analyzed by and considering the core competencies and resources.).

As per claim 21, Barkley et al. teach:

The method of claim 1, wherein the ranking is based at least in part on total cost metric values assigned to the tasks of the process map (see pp. 111-116, and 256-258; where values are associated with processes that define a customer need. The processes are ranked in terms of which processes are critical considering the costs associated with the process. Cost metrics are one of several factors considered in ranking the processes.).

As per claim 22, Barkley et al. teach:

The method of claim 1, wherein the ranking is based at least in part on assessments of developmental maturity of the tasks of the process map (see pp. 111-116, and 256-258; where values are associated with processes that define a

customer need. The processes are ranked in terms of which processes are critical considering the turn-around times associated with the process. Turn-around times are one of several factors considered in ranking the processes. Turn-around times are the same as developmental maturity.).

#### Claim Rejections - 35 USC § 103

- 11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 12. Claims 7, 10, 11, 16, and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Barkley et al. (Barkley, Bruce T.; Saylor, James H.; <u>Customer-Driven Project Management</u>, McGraw-Hill Inc., 1994).

As per claim 7, Barkley et al. teach:

The method of claim 6,

Wherein the associating comprises respectively assigning one or more of the following task parameter metrics to the tasks associated with each of the selected potential target customer need states: a cost metric and a metric measuring diversity of association with different potential target customer need states (see pp. 111 and 256-258; where objectives, requirements, and target values are associated with tasks and processes.).

Barkley et al. fail to explicitly teach an "incidence rate metric". It is old and well-known in the art to use an incidence rate metric to determine a customer need. The

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advantage of using an incidence rate metric is that it allows a user to determine, based on the reoccurrence of a process, which customer needs are critical. It would have been obvious, at the time of the invention, to one of ordinary skill in the art to use an "incidence rate metric" in order to determine the customer needs which are critical, which is a goal of Barkley et al. (see p. 111).

As per claim 10, Barkley et al. teach:

The method of claim 1, further comprising estimating values of unit costs, total costs, and outcomes for each task in the generated process map (see pp. 111 and 256-258; where objectives, requirements, and target values for costs, inputs, and outputs of each task are determined. Where costs are broken down into subprocesses, such as total or unit, values for these parameters are determined as well.).

Claim 10 further recites limitations already addressed by the rejection of claim 7; therefore the same rejection applies to this claim.

As per claim 11, Barkley et al. teach:

The method of claim 10, wherein the ranking is based at least in part upon one or more of the estimated values (see pp. 111 and 256-258; where processes are ranked based on which processes are critical. Assigning a level of critical to processes is the same as ranking the processes in terms of need.)

As per claim 16, Barkley et al teach associating a customer assessment value with each customer needs (see p. 113-116 and 256-258; where customer needs and customer expectations are incorporated as inputs in determining opportunities.).

Barkley et al. fail to explicitly teach selecting a customer need having a highest customer assessment value. Barkley et al. do teach incorporating several factors, including a customer assessment value, into the determination of which customer need to select (see pp. 113-116 and 256-258; where customer assessment is a value used in the determination of improving opportunities. The customer assessment value is incorporate as an input into the process diagram.). It is old and well-known in the art to select an opportunity based on a factor that is collected, input, and analyzed. The customer assessment value is such a factor that is collected, input, and analyzed by the Barkley et al. method. The advantage of selecting a opportunity based on a collected, input, and analyzed factor is that it enables one to select the most appropriate opportunity. It would have been obvious, at the time of the invention, to one of ordinary skill in the art to select an opportunity based on a collected, input, and analyzed factor, such as a customer assessment value, in order to select the most advantageous opportunity, which is a goal of Barkley et al. (see pp. 106 and 111).

As per claim 23, Barkley et al. do not explicitly teach a method for a medical industry. However, Barkley et al. discloses a opportunity identification method that can be applied to a variety of industries, regardless of the intended field of use of the method. Barkley et al. teach a generic customer-driven opportunity method that has utility in other industries. The method being adapted to medical industry is irrelevant since the intended use does not change the overall functionality of the method. The intended use must result in a manipulative difference as compared to the prior art. See *In re Casey*, 152 USPQ 235 (CCPA 1967) and *In re Otto*, 136 USPQ 458, 459 (CCPA

1963). Therefore, it would have been obvious, at the time of the invention, to one of ordinary skill in the art to use the Barkley et al. method at a medical industry because Barkley et al. method is designed to be used as a customer-driven opportunity method regardless of the intended use.

#### Conclusion

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The following are pertinent to the current invention, though not relied upon:

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kalyan K. Deshpande whose telephone number is (571)272-5880. The examiner can normally be reached on M-F 8am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tariq Hafiz can be reached on (571) 272-6729. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Kaga Brank